DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Yes

No

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002302 Address: 333 Burma Road Date Inspected: 20-Dec-2007

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 830 **OSM Departure Time:** 2000 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muraran, Japan

CWI Name: CWI Present: Yes No Jomio Imai (Welding Engineer) **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No N/A No

Electrode to specification: Yes No N/A Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Delayed / Cancelled:

34-0006 **Bridge No: Component:** test plate

Summary of Items Observed:

Witness welder qualification welding test:

Caltrans Quality Assurance (QA) representative, Mr. Wai Pau traveled to Japan Steel Work (JSW) in Muroran Japan, to witness four welders performed welder qualification test apply for Caltrans project San Francisco Oakland Bay Bridge (SFOBB) # 04-0120F4 cable saddle welding. The welder names are Mr. Hitoshi Sato (69-2697), Mr. Satoshi Morohashi (91-2255), Mr. Hisanori Onodera (93-2272) and Noritake Tamura (93-2337). The welder qualification tests are utilizing the Flux Cored Arc Welding (FCAW) process were conducted by the four welders performed in the horizontal position (2G). The material used for the four welder qualification test specimens was reported by JSW Welding Engineer Mr. Jomio Imai as ASME SA-516M Grade 450 having a wall thickness measurement of 19mm. The weld joint design used butt joint, single-V-groove weld with backing welding (ASME IX QW-402.4). The filler metal and shield gas used in the test is FC-1 (classification No: E71T-1) with 1.2mm diameter wire, made by Nippon Steel, Japan and 100% carbon dioxide (CO2) shielding gas. The FCAW welding parameters used for the welder qualification tests were conducted in accordance with procedure No. SP-84058-WP-4 which was previously submitted two days prior qualification test. Monitoring and recording of the welder qualification tests by JSW Welding Engineer Mr. Jomio Imai was observed by Caltrans QAI. The five welder qualification tests appeared to be in general compliance with requirements of ASME IX 2005 section QW-400 and Caltrans contract documents.

Summary of Conversations:

JSW Welding Engineer Mr. Jomio Imai informed Caltrans QAI that FCAW welder qualification test for ASME standard will continue tomorrow 0830, 12-21-07. The specimens for today welder qualification test are schedule for Non-Destructive Examined (NDE).

N/A

N/A

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer (858)697-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Brasel,Ron	QA Reviewer